

8/1/02

## Risk Implications - What We Know -

Rupture of the exposed clad area would create a medium LOCA.

Prevention of core damage requires:

high and low pressure injection by Emergency Core Cooling System

operation of Emergency Core Cooling System in low pressure recirculation mode

Conditional probability of core damage for a medium LOCA is 0.007 in Davis Besse IPE.

20% due failures of injection mode

80% due to failures of recirculation mode

Conditional probability for large early release for medium LOCA core damage events is about 0.006 for large, dry containments in NRC's NUREG-1150 PRAs

## Risk Implications - What We Don't Yet Know

Probability of rupture for similar reactor pressure vessel head wastage events.

How fast does wastage occur?

What is probability for detecting condition by inspection?

Frequency of occurrence of conditions necessary to cause severe head wastage.

Necessary conditions not yet determined.

## Risk Implications - Bottom Line With Current Knowledge

Core Damage Probability appears to be less than about 0.004 for situation found.

Probability for Large Early Release of Radioactive materials appears to be less than about 0.00002 for situation found.